

**Notice of Allowability**

Application No.

09/696,462

Examiner

AHMED ELALLAM

Applicant(s)

ROA-DIAZ, MARLON B.

Art Unit

2662

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment after final filed on 2/28/2005.
2. ☒ The allowed claim(s) is/are 1-13, 20-34, 38 and 39, respectively renumbered 1-30.
3. ☒ The drawings filed on 09 August 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**JOHN PEZZLO**  
**PRIMARY EXAMINER**

### **REASONS FOR ALLOWANCE**

1. The following is an examiner's statement of reasons for allowance:

The prior art of records does not teach or fairly suggest the followings:

A ring network, comprising (inter alias):

A number of network elements, each comprising first and second switch fabrics, at least two uni-directional busses coupled between the first and second switch fabrics, each first and second switch fabrics of each network element separately track the status of a number of virtual connections such that when an error is detected by one of the switch fabrics associated with a working route for a virtual connection, the switch fabric detecting the error communicates the change in state for the virtual connection to the other switch fabric over one of the first and second unidirectional busses to be used in a switching decision, as indicated in independent claims 1, 7 and 13.

A method for protection switching in a ring network having first and second routes for transporting cells using virtual connections wherein, for each virtual connection, one route is a working route and the other route is a protection route, the method comprising (inter alias): detecting an error in one of the first and second routes (the "errored route"), generating error cells for each virtual connection that is affected by the detected error, injecting the error cells to be transmitted downstream on the errored route, receiving error cells at a first switch fabric at a downstream network element

associated with the errored route, communicating the change in state of the errored route to a second switch fabric of the downstream network element associated with the other of the first and second routes (the "other route"), determining whether the state of the other route is acceptable for a protection switch, and if that is the case, and the other route is configured as the protection route for a virtual connection, automatically configuring the second switch fabric to establish the other route to be the working route for the virtual connection, as indicated in independent claims 20 and 38.

A method for protection switching in a ring network having first and second routes for transporting cells using virtual connections wherein, for each virtual connection, one route is a working route and the other route is a protection route, the method comprising (inter alias): monitoring the first and second routes for changes in at least a selected condition at a first and second switch fabrics of a network element, communicating a change of state of one of the first and second routes detected by one of the first and second switch fabrics to the other of the first and second switch fabrics associated with the other of the first and second routes, determining whether the state of the other route is acceptable for a protection switch, and if that is the case, and the other route is configured as the protection route for a virtual connection, automatically configuring the second switch fabric to establish the other route to be the working route for the virtual connection, as indicated in independent claim 31.

### **Conclusion**

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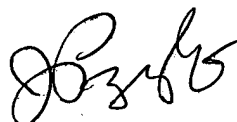
2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571) 272-3097. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kizou Hassan can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM  
Examiner  
Art Unit 2662  
03/16/2005

  
JOHN PEZZLO  
PRIMARY EXAMINER